

APPENDIX I  
REMEDIAL DESIGN/ACTION PLAN

Site:	_____
Break:	_____
Other:	_____

A. PURPOSE OF PLAN

This Remedial Design/Action Plan (RD/AP) defines the remedial activities to be undertaken by Settlers under this Consent Decree to complete the remedial response at the Industri-Plex Site as defined in the United States Environmental Protection Agency (EPA) Record of Decision (ROD) signed by the Regional Administrator, Region I, on September 30, 1986. Parts B, C, and D of this Appendix I set forth a description of the remedies for soils, air, and water respectively. Parts E and F of this Appendix I set forth the requirements and procedures that the Settlers shall follow during the Remedial Design and Remedial Action phases of the work.

B. REMEDY FOR CONTAMINATED SOILS

The remedial action for soils, sediments and sludges contaminated with Hazardous Substances, other than those emitting odors, shall include site grading, capping with a permeable soil cover, excavation, dredging, and/or consolidation for all areas containing Hazardous Substances at concentrations above established action levels, and development of Institutional Controls for all areas containing hazardous substances at greater than background levels to ensure the long-term effectiveness of the remedial action.

### 1. Action Levels for Metals

The action levels established in the ROD for Hazardous Substances other than odors in soils, sediments and sludges are 300 parts per million (ppm) arsenic, 600 ppm lead and 1000 ppm chromium.

### 2. Contaminated Soils

Settlers shall design and implement remedial action for soils contaminated with Hazardous Substances above the action level for metals that shall consist of site grading and capping, together with Institutional Controls as described in Attachment B. Areas of soils contaminated with Hazardous Substances, as far as is currently known, are shown on Attachment F. Note that East Hide Pile remedial action is covered under Part C of this RD/AP. Areas already covered adequately by buildings, roadways, parking lots, or other ground-covering features, would not receive cover material, instead allowing the structures themselves to act as the protective cap.

For small areas on-Site, such as the landscaped areas between buildings and parking lots, Settlers may propose location-specific alternatives to capping consisting of excavation of contaminated soil and consolidation on-site with similarly contaminated soils, or placement of a protective layer such as asphalt to cap the contaminated soils.

Settlers shall design and implement the remedial actions for contaminated soils in accordance with the following requirements:

(1) Cap design and construction activities shall be in accordance with regulations and/or guidance on cap design for permeable covers as summarized in Attachment A hereto; provided that an alternative permeable cap design including a design using a permeable synthetic fabric and a soil layer less than 30 inches in depth, may be used in all areas of the Site where Settlers demonstrate to EPA and the Commonwealth that the alternative cap design will perform as well as or better than the permeable cap design summarized in Attachment A. The primary factors to be considered by EPA and the Commonwealth in evaluating the performance of an alternative cap design are:

- (a) assurance that direct contact with contaminated soils will be eliminated;
- (b) effects of the freeze/thaw cycle on long term performance;
- (c) effects of erosion on performance;
- (d) durability and long term reliability of the design and its components (e.g. the durability and reliability of any synthetic materials and of any joints in such materials); and
- (e) adequacy of plans and procedures to assure quality control during installation.

Settlers shall propose any alternative cap design no later than thirty (30) days after the entry of this Consent Decree. EPA in consultation with the Commonwealth shall complete its evaluation of the general adequacy of any alternative cap design as soon as practicable after Settlers have provided information that EPA in consultation with the

Commonwealth deems sufficient for assessment of the above factors, and in no event later than one hundred eighty (180) days after the entry of this Consent Decree. EPA in consultation with the Commonwealth may reject any alternative cap design for failure to achieve the specified performance factors or for lack of sufficient information upon which to base a decision. After having given general approval of the use of any alternative cap design in the Site, EPA in consultation with the Commonwealth may disapprove the use of the alternative design at specific locations based on location-specific performance factors.

(2) Site grading and cap installation shall be in accordance with good engineering practices and consistent with 40 CFR § 264.303(a).

(3) Site grading and capping activities in or affecting floodplains shall be consistent with Executive Order 11988 § 2(a)(1); and activities in or affecting wetlands shall be consistent with Executive Order 11990 § 2(a)(2).

(4) Survey of the Site shall be conducted consistent with 40 CFR §§ 264.309 and 264.116 and sufficient to implement Section XIV.B.(2) of the Consent Decree.

(5) Closure performance standards and certification shall be consistent with 40 CFR § 264.111 (a) and (b).

(6) Site security shall be provided consistent with 40

CFR § 264.14 and in accordance with any site security requirements developed pursuant to Attachment B.

(7) Post-closure care and use of the property and monitoring shall be consistent with 40 CFR §§ 264.117, 264.310(b)(1), (3), (4) and (5) and any additional requirements developed pursuant and Attachment B.

(8) Air monitoring shall be conducted in accordance with requirements defined during the Remedial Design.

### 3. Contaminated Sediments and Sludges

For areas where Hazardous Substances above action levels are in direct contact with wetlands or surface water bodies or abutting such wetlands or surface water bodies, Settlers shall use the appropriate action listed below to eliminate the actual or potential adverse impact resulting from the contact of Hazardous Substances with such wetlands or surface water bodies.

First, for all wetlands (including the Chromium Lagoons, the general location of which is shown on Attachment F), drainage streams, ditches, and ponds where there are no odor-emitting Hazardous Substances (e.g. hide wastes), Settlers shall dredge the Hazardous Substances or remove them by another method shown to be environmentally protective and approved by EPA in consultation with the Commonwealth under this Consent Decree. Hazardous Substances removed from such areas shall be consolidated in other areas of the Site which contain such Hazardous Substances and which will be covered as part of the

approved remedial action. Settlers shall design the protective cover abutting wetlands, streams, ditches and ponds, and shall use excavation/consolidation only as necessary, to maintain the existing contours of the water body and to accommodate the increased erosion potential in such areas.

For man-made drainage swales, Settlers may propose culverting to cover the sediment as an alternative to removal of the sediment. Settlers shall demonstrate the acceptability of such an alternative during Remedial Design.

Second, for wetland areas or surface water sediments containing hide materials that have the potential for odor release, Settlers shall cover the deposits in-situ, minimizing to the extent practicable the impact on the wetlands. The general locations of hide materials, as far as is currently known, are shown on Attachment F.

The following additional requirements shall apply to the remedial actions for contaminated sediments and sludges:

(1) Bulkheading and capping activities associated with odor emitting Hazardous Substances (e.g. hide wastes) in direct contact with surface waters and wetlands including, but not limited to, such portions of the East and West Hide Piles, shall be consistent with the technical requirements of subparts B.2.(1-8) above.

(2) Excavation (dredging) and on-site consolidation and capping of other Hazardous Substances (e.g. metals) in direct contact with surface waters and wetlands including,

but not limited to, areas of the pond between the East and West Hide Piles, the discharge stream for that pond, the drainage ditch paralleling New Boston Street and the drainage swale adjacent to the Chromium Lagoons, shall be consistent with subparts B.2.(1-8) above and the following requirements:

(a) National Ambient Water Quality Criteria and the Massachusetts Water Quality Standards for the Hazardous Substances present at the Site;

(b) NPDES technical requirements as codified in 40 CFR Part 122, relative to dewatering, treatment and discharge of pond and surface drainage waters from controlled (e.g. bulkheaded) work areas and sediment dewatering activities; and

(c) restoration of the wetlands consistent with 40 CFR Part 6, Appendix A, § 6(a)(5).

C. AIR REMEDY FOR THE EAST HIDE PILE

The remedial action for control of air emissions is intended to mitigate the release or threat of release of Hazardous Substances, including odors associated with decaying hide waste, in the East Hide Pile. The general location of the East Hide Pile is shown on Attachment F.

The remedial action shall consist of stabilizing the side slopes of the East Hide Pile, installing a gas collection layer, capping with a synthetic membrane to establish impermeability,

and soil cover in accordance with Attachment A, and treating gaseous emissions with either activated carbon or thermal oxidation. EPA in consultation with the Commonwealth will approve the final decision as to which gas treatment system to install after the impermeable cover and gas collection system have been constructed and the pile allowed to reach equilibrium. Settlers shall operate a temporary gas treatment system and shall monitor gas generation and pile settlement until the pile has reached equilibrium. The final decision regarding the permanent gas treatment system will be to provide the most efficient and cost effective long-term remedy to the emission of odors and other Hazardous Substances based on the characteristics of the gaseous discharge and other engineering criteria established during the Remedial Design process. EPA in consultation with the Commonwealth will specify the final treatment decision in a subsequent document.

The following additional requirements shall apply to the air remedy:

(1) technical requirements and standards of the Clean Air Act (CAA) and Massachusetts Regulations for the Control of Air Pollution 310 CMR 7.00 and especially 7.09 as mandated by Mass G. L. c. 111, §§ 142B and 142D;

(2) technical requirements of Section 404(b)(1) of the Clean Water Act (CWA), 33 U.S.C. § 1344; and

(3) the requirements of B.2.(1)-(8) above.



D. GROUNDWATER REMEDY

The remedial action for groundwater shall include an interim remedy of pumping and treating "hot spot" areas of groundwater contamination and the concurrent development and implementation of a Groundwater/Surface Water Investigation Plan (GSIP) to evaluate Site-wide groundwater and surface water contamination.

1. Interim Groundwater Remedy

Settlers shall design and implement an interim groundwater remedy that shall consist of several interceptor/recovery wells located to capture the identified plumes of Hazardous Substances (benzene and toluene) migrating in groundwater, construction of a treatment system, and operation and maintenance of these remedial components until the appropriate performance standards are achieved. The general area of groundwater contamination "hot spots" as known in 1984 and the general location of the interceptor wells related to the interim remedy are shown on Attachment G. Settlers shall pretreat recovered groundwater to control odors and to remove dissolved or suspended Hazardous Substances, and shall subject the recovered groundwater to air stripping to remove volatile Hazardous Substances. Settlers shall during Remedial Design identify appropriate performance standards for groundwater and effluent water quality and shall submit these proposed performance standards to EPA and the Commonwealth for review and approval. The treated effluent shall

be discharged via a subsurface leaching pit to be located on-Site in an upgradient portion of the aquifer.

Settlers shall consider the following requirements in the design of the interim groundwater remedy:

- (1) post closure care and groundwater monitoring consistent with 40 CFR Part 264, Subpart F;
- (2) technical requirements and standards of the Safe Drinking Water Act, 40 CFR Parts 141 and 142;
- (3) EPA's Groundwater Protection Strategy guidelines;
- (4) requirements of Section 303 of the Clean Water Act and the National Ambient Water Quality Criteria for benzene, toluene and any other Hazardous Substances contained in the plumes addressed by the interim remedy;
- (5) requirements of the National Pollutants Discharge Elimination System, CWA Sections 402(a)(1)-(3); and
- (6) requirements, standards and the unit risk guidelines of the Clean Air Act.

## 2. Groundwater/Surface Water Investigation Plan (GSIP)

Settlers shall develop and implement the GSIP as part of the Remedial Design. The GSIP shall fulfill the requirements and objectives of a Remedial Investigation, and will be incorporated into a Multiple Source Ground Water Response Plan (MSGWRP) leading to selection of a final remedy for area wide groundwater and surface water contamination. Settlers shall conduct the GSIP in accordance with the scope of work in Attachment H.

E. REMEDIAL DESIGN

The remedial design process shall consist of a pre-design phase and a remedial design phase. Settlers shall prepare separate work plans for each phase and shall submit them to EPA and the Commonwealth for review and approval. The Pre-Design Work Plan and the Remedial Design Work Plan shall address, at a minimum, the items included below in subparts 2 and 4 below, respectively.

1. Initial Remedial Steps

a. Within fifteen (15) days following the entry of this Consent Decree, Settlers shall complete an inspection of the existing Site security fence and within thirty (30) days following such site inspection shall implement all fence repairs necessary to prevent unauthorized entry to the fenced portions of the Site. Settlers shall be responsible for maintenance of this fence and any other necessary security fencing on all areas of the Site until certification of completion of the Remedial Action. Settlers shall thereafter be responsible for maintenance of appropriate portions of the Site security fencing as provided for in the Operation and Maintenance Plan to be developed pursuant to section E.4.a.(6) below.

b. Within fifteen (15) days after entry of this Consent Decree, Settlers shall submit to EPA and the Commonwealth for approval the names and qualifications of the contractors from whom the Settlers will solicit bids to perform the remedial

design tasks set forth in this RD/RA plan (i.e. Settlers' short list of bidders).

c. Within ninety (90) days after Settlers receive notification of EPA approval of the remedial design short list of bidders, Settlers shall notify EPA and the Commonwealth of the name of the selected contractor and shall submit to EPA and the Commonwealth a letter of acceptance from the contractor.

2. Pre-Design Work Plan

a. Within sixty (60) days after EPA receives the name of the selected remedial design contractor, Settlers shall submit a Pre-Design Work Plan to EPA and the Commonwealth for review and approval. The Pre-Design Work Plan shall specify and describe all tasks and investigations to be undertaken to facilitate the Remedial Design, and to ensure the effectiveness of the Work. The Pre-Design Work Plan shall include at a minimum the items specified in (1) through (3) below:

(1) A Project Operations Plan (POP) consistent with Attachment C, prepared in support of all field work to be conducted under this Consent Decree, which POP shall include the following:

(a) a site-specific health and safety plan  
(Attachment C, Part A);

(b) a quality assurance/quality control plan  
(Attachment C, Part B);

(c) a detailed sampling and analytical plan  
(Attachment C, Part C);

(2) A detailed description of the investigations required in the ROD and necessary for the design and implementation of the above-specified remedial actions. This description shall include for each investigation a statement of purpose and objectives, identification of the specific activities necessary to conduct the investigation, and a timetable for performance of the activities including submittal of study reports. This description shall encompass, at a minimum, the investigations specified in items (a) through (h) below:

(a) An investigation to define, by soil borings and test pits, the horizontal and vertical extent of hazardous substances within the developed areas and, to the extent existing data is inadequate, all other areas of the Site. The objective of the study shall be to accurately define those portions of the Site containing Hazardous Substances at or above the established action levels and those portions containing Hazardous Substances below the action levels but above background levels. Data from these studies will be used to determine the appropriate remedial actions consistent with available options set forth in Section B of this Appendix for areas of the property currently used as part of or necessary to the business operating on the property as well as undeveloped areas. In taking samples for this investigation, Settlers will not be required to drill through or otherwise penetrate existing structures or pavement. Included in this Site investigation shall be additional soil borings and test pits on the Boston Edison Right of Way Number 9 which extends to Commerce Way. The general area of concern relative to this study is outlined on Attachment G. This area is included within the definition of the Site and is approximately outlined on Attachment E as "Area A."

(b) An investigation including additional soil borings and monitoring wells in the vicinity of the East and West Hide Pile. This additional effort is intended to identify the requirements necessary to establish a firm base at the toes of the East and West Hide Piles to minimize the possibility of the slope

failure. This additional information is to be used to ensure that impacts to the wetlands are kept to an absolute minimum. The installation of the monitoring network shall be designed to provide a ground water quality and soil condition data base and to allow for post-closure monitoring in areas of the East and West Hide Pile adjacent to the wetlands.

(c) An investigation to define the horizontal and vertical extent of sediments contaminated with Hazardous Substances in the site ponds and surface water drainage areas (e.g. streams, ditches, swales) and to establish the area and depth of dredging necessary to provide adequate protection of public health and the environment.

(d) A baseline investigation to establish an effective air monitoring program and to determine acceptable on-site and off-site air quality standards for hazardous volatile compounds and/or other odorous compounds and dust relative to planned grading, consolidation, excavation, dredging, groundwater treatment and capping activities.

(e) Treatability studies for site surface waters to be treated prior to discharge to ground water or to surface waters beyond the limits of dredging.

(f) An investigation to evaluate sources of cap materials for their ability to meet technical design requirements as specified in this Consent Decree or otherwise approved by EPA and the Commonwealth.

(g) Investigations to more accurately characterize the "hot spot" areas of benzene and toluene contamination, to assess the treatability of groundwater, and to provide data to be used in the development of operating parameters such as pumping rates, interceptor well locations, recharge area location and period of system performance. Included in these groundwater investigations shall be Settlers proposed performance standards for effluent water quality.

(3) A detailed description of a comprehensive Site monitoring program. This comprehensive monitoring program shall encompass all air, groundwater, surface water and soil monitoring required throughout the Remedial Design and

Remedial Action. Note that monitoring to be conducted after completion of the Remedial Action shall be included in the Operation and Maintenance program set forth in part 4.a. below. The comprehensive monitoring program shall include monitoring to be conducted, at a minimum, for the following purposes:

- (a) to assure compliance with the health and safety plan developed pursuant to this RD/AP;
- (b) to provide data to assist in the development of the temporary gas treatment system to be operated at the East Hide Pile;
- (c) to monitor the operation of the temporary gas treatment system and provide sufficient data to characterize the emissions and design the final gas treatment system;
- (d) to monitor the rate of settling of the East Hide Pile and to determine when equilibrium within the pile has been reached; and
- (e) to monitor the performance of the interim groundwater remedy and to determine when the approved performance standards for the "hot spots" have been reached.

### 3. Implementation of the Pre-Design Work Plan

Within thirty (30) days after Settlers receive the Pre-Design Work Plan as approved, amended or developed by EPA in consultation with the Commonwealth, Settlers shall commence implementation of the activities set forth therein in accordance with the specified timetables.

### 4. Remedial Design Work Plan

a. Within seventy-five (75) days after EPA in consultation with the Commonwealth approves the Pre-Design Work Plan Settlers shall submit a Remedial Design Work Plan to EPA and the Commonwealth for review and approval. The Remedial Design Work Plan shall set forth all activities to be undertaken in connection with the design of the Remedial Action, and shall include a proposed timetable for completion of the design process. The Remedial Design shall include at a minimum the activities set forth in the following items (1) through (7):

(1) An evaluation of the feasibility of initiating remedial activities for distinct, separable, remedial actions, e.g., the interim groundwater remedy or the air remedy, consistent with this RD/AP but ahead of the schedule for design activities for other elements of the work.

(2) Development of detailed design plans and specifications for the above specified remedies in accordance with the design and construction requirements of 40 CFR § 264.310 and the performance standards of 40 CFR § 264.111;

(3) Submission of design plans to EPA and the Commonwealth for review and approval, at four stages during their development as indicated in items (a) through (d) below:

(a) preliminary design addressing approximately 30% of the total design. The deliverables for this 30 design submission will be specified in the Remedial Design Work Plan.



(b) intermediate design addressing approximately 60% of the total design. The deliverables for this 60% design submission will be specified in the Remedial Design Work Plan.

(c) pre-final design addressing 95% of the total designs which shall include, at a minimum:

- i. corrected design prints and calculations with written comments to define corrections and/or additions made to the 60% design plans;
- ii. plans, specifications and calculations equivalent to 95% of the overall design;
- iii. initial draft Operation and Maintenance Plan consistent with section E.4.a(5) below;
- iv. preliminary bid documents; and
- v. a summary of the experience and qualifications of invited bidders.

(d) a final design addressing 100% of the total design for each site area remedy which shall include:

- i. final plans and specifications in reproducible format;
- ii. final bid documents;
- iii. an Operation and Maintenance Plan consistent with section E.4.a(6) below.

(4) Submission with the preliminary (30%) design, a statement of all applicable or relevant and appropriate State standards and Federal requirements, including the substantive technical standards and requirements necessary to obtain, but not actually obtaining, State and Federal permits as they relate to the specific circumstances and response activities at this Site, including, but not limited to, standards or requirements under the following:

(a) Resource Conservation and Recovery Act (RCRA) and regulations as codified in 40 CFR, Part 264, Subpart B, F, G and N;

(b) Clean Water Act (CWA);

(c) Clean Air Act;

(d) Safe Drinking Water Act;

(e) Executive Orders 11988 (Floodplain) and 11990 (Wetlands), and Guidance outlined under 40 CFR Part 6, Appendix A;

(f) Statutes regarding waterways including Mass. G.L. c. 91, § 3, 15, 17, 18, 19A and 23 and regulations thereunder;

(g) Massachusetts Clean Water Act, Mass. G.L. c. 21, § 42 and Regulations thereunder;

(h) Massachusetts Clean Air Act, Mass. G.L. c. 111, § 142A through 142J and Regulations thereunder;

(i) Massachusetts Wetlands Protection Act, Mass. G.L. c. 131, § 40 and Regulations thereunder; and

(j) State and Federal requirements that apply to the Institutional Controls set forth in Attachment B.

(5) The analysis of the conformance of the design with applicable and relevant and appropriate public health and environmental requirements along with supporting documentation of that analysis shall be provided in draft with the pre-final design submittal. The final design submittal shall include the final analysis and supporting documentation plus the response to the comments of the Agencies on the draft.

(6) Development of an Operation and Maintenance Plan that shall ensure the long-term, continued effectiveness of the remedial action and that shall include:

(a) a cost estimate for post-closure care consistent with 40 CFR § 264.144;

(b) establishment of a financial assurance mechanism for post-closure care consistent with 40 CFR § 264.145;

(c) a post-closure care inspection schedule and provisions for implementing the following activities for a minimum of at least thirty (30) years as provided in 40 CFR § 264.117(a)(1) and (2), subject to extension of the post-closure care period as provided by 40 CFR § 264.117(b):

- i. maintenance of the integrity and effectiveness of the final cap, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events including those events controlled by the requirements imposed by institutional controls as set forth in Attachment B;
- ii. protection and maintenance of surveyed benchmarks and site security measures;
- iii. surface water quality monitoring on the site in the ponds and drainage features, (e.g. streams, ditches and swales), at locations to be defined during remedial design;
- iv. a monitoring program to ensure compliance with applicable State standards and Federal requirements;
- v. operation and maintenance of the East Hide Pile odor control system; and
- vi. a schedule for completion of each activity.

##### 5. Implementation of the Remedial Design Work Plan

Within ten (10) days after receipt of the Remedial Design Work Plan as approved, amended, or developed by EPA in consultation with the Commonwealth, Settlers shall initiate performance of the activities set forth therein in accordance with the specified timetables and shall submit to EPA and the

Commonwealth for review and approval each of the items described in the Remedial Design Work Plan, including, but not limited to, each of the items specified in section E.4 above.

F. REMEDIAL ACTION

1. Remedial Action Contractor

a. Within one hundred twenty (120) days after the date Settlers receive notification by EPA of the approval of the final (100%) Remedial Design for the site remedial actions or distinct remedial action (e.g., Soil, Groundwater or Air remedy) Settlers shall notify EPA and the Commonwealth of the name of the selected remedial action construction contractor and shall submit to EPA and the Commonwealth a letter of acceptance from the contractor.

2. Remedial Action Work Plan

Within sixty (60) days after EPA receives the name of the selected remedial construction contractor, Settlers shall submit to EPA and the Commonwealth for review and approval a Remedial Action Work Plan for implementing the Site remedial actions and associated activities including operation and maintenance consistent with the approved design for each Site area. This Work Plan shall contain:

(1) a description of all activities necessary to implement the Remedial Actions; and

(2) a timetable for the completion of all these activities, which shall also identify major and minor

milestone events in the remedial action process. The schedule of significant events shall be consistent with Attachment D.

3. Implementation of the Remedial Action Work Plan

a. Within sixty (60) days after Settlers receive the Remedial Action Work Plan as approved, amended, or developed by EPA in consultation with the Commonwealth, Settlers shall initiate remedial activities including excavation and construction activities in accordance with the Remedial Action Work Plan and schedules contained therein.

b. During the construction period monthly meetings shall be held between the Settlers, their contractor(s), EPA, the Commonwealth and the oversight contractor regarding progress and details of construction.

c. Within thirty (30) days of notification by Settlers of expected construction completion, EPA in consultation with the Commonwealth shall issue a written notice to Settlers of items necessary for completion of on-Site remedial construction work.

d. Upon construction completion Settlers shall submit to EPA and the Commonwealth a final remedial construction report that includes a certification of completion from a professional engineer registered in the Commonwealth of Massachusetts that work has been completed in compliance with the terms of the remedial design.

e. Within thirty (30) days after Settlers receive EPA approval of the Settlers' certification of completion of construction activities, Settlers shall implement all operation and maintenance activities, according to the terms and schedules set forth in the Operation and Maintenance Plan; provided that following completion of construction, Settlers who are not landowners will not be required to perform or finance normal maintenance of property unless such maintenance results from a defect in the remedy. Settlers who are landowners shall finance and perform normal maintenance on their individual properties.

## ATTACHMENT A

### COVER DESIGNS

Settlers shall observe the following requirements in designing and constructing caps pursuant to this Consent Decree, unless an alternative design providing equivalent performance has been approved by EPA in consultation with the Commonwealth under this Consent Decree.

#### A. PERMEABLE COVERS

Permeable covers shall be designed and constructed to include at a minimum the following:

(a) A vegetated top layer which shall be:

- (1) of a minimum thickness of six (6) inches;
- (2) capable of supporting vegetation that minimizes erosion and minimizes continued maintenance;
- (3) planted with a persistent species with roots that will not penetrate into the contaminated soil;
- (4) designed and constructed with a top slope of between three (3) and five (5) percent after settling and subsidence or, if designed and constructed with less than (3) percent, a drainage plan to ensure that ponding of surface water does not occur or, if designed and constructed with a slope of greater than (5) percent, an expected soil loss of less than two (2) tons/acre/year using the USDA universal soil loss equation; and
- (5) designed and constructed with a surface drainage system capable of conducting effective run-off across the cap.

(b) A base layer that shall be:

- (1) of a minimum thickness of twenty four (24) inches of appropriate fill material; and

- (2) designed and constructed to prevent clogging.

B. IMPERMEABLE COVERS

1. Impermeable covers shall be designed and constructed to include at a minimum the following:

- (a) A vegetated top layer which shall be:

- (1) of a thickness designed to accomodate the maximum depth of root penetration and the rate of anticipated soil loss, but in any event no less than six (6) inches;

- (2) capable of supporting vegetation that minimizes erosion and minimizes continued maintenance;

- (3) planted with a persistent species with roots that will not penetrate beyond the vegetative and drainage layers;

- (4) designed and constructed with a top slope of between three (3) and five (5) percent after settling and subsidence or, if designed and constructed with a slope of greater than five (5) percent, an expected soil loss of less than two (2) tons/acre/year using the USDA universal soil loss equation; and

- (5) designed and constructed with a surface drainage system capable of conducting effective run-off across the cap.

- (b) A middle drainage layer that shall be:

- (1) of a thickness designed to accomodate the expected amount of settling and the maximum volume of water that could enter the drainage layer, but in any event no less than six (6) inches;

- (2) consisting of a material whose permeability exceeds  $1 \times 10^{-3}$  cm/sec., i.e. a sand in the SW or SP range of the Unified Soil Classification System or coarser material.

- (3) designed and constructed with a bottom slope of at least two (2) percent; and



(4) designed and constructed to prevent clogging.

(c) A bottom impermeable layer consisting of the following:

(1) an impermeable synthetic membrane having a thickness of at least forty (40) mil;

(2) a bedding layer designed to prevent clogging of the underlying gas collection layer and to provide a stable base for overlying layers (The gas collection layer may itself serve as the bedding layer provided that it will support the weight of the cap and will not abrade the synthetic membrane.);

(3) a final upper slope of at least two (2) percent.

2. The thickness of the vegetated top layer and drainage layer combined shall be designed so that the impermeable layer is located wholly below the average depth of frost penetration in the area of interest, unless the Settlers can demonstrate during remedial design that a reduction in the thickness of the overlying layers will not affect the integrity of the synthetic membrane.

#### C. DESIGN MODIFICATIONS

In limited areas, where appropriate to prevent slope failure, to minimize excavation of hazardous wastes, or to minimize wetlands infringement, the Settlers may propose modifications to the design requirements of A and B for approval by EPA in consultation with the Commonwealth and may utilize such modifications upon approval.

ATTACHMENT B  
INSTITUTIONAL CONTROLS

I. INSTITUTIONAL CONTROLS FOR AREAS OF CONTAMINATION AT OR ABOVE ACTION LEVELS

A. PURPOSE

The paramount purpose of Institutional Controls is the preservation of the continued effectiveness of the remedial actions in order to protect human health and the environment. To the extent that it is feasible to do so consistent with this paramount purpose, EPA and the Commonwealth may approve designs of Institutional Controls that permit the greatest possible use and enjoyment of the Site or parts of the Site.

B. DESCRIPTION OF INSTITUTIONAL CONTROLS

Institutional Controls shall apply to those areas of the Site where the contaminant levels equal or exceed the action levels specified in the ROD. The areas subject to Institutional Controls include areas where contamination above actions levels is present more than thirty inches beneath the surface (i.e. areas that will not be capped). Where Institutional Controls are required, they may provide for defined classes of disturbance or modification, such as major or minor, combined with various categories of governmental notification and approval requirements. Institutional Controls shall also provide for post-closure inspection, care and repair and maintenance of caps or other ground covering structures and features such as roads, parking lots and railroad lines ("Cap Equivalents") that are currently in

existence or will be constructed in the future on individual parcels of property. In designing Institutional Controls Settlers shall consider relevant and appropriate regulations promulgated under the Resource Conservation and Recovery Act (RCRA) and other authorities.

C. DESIGN OF INSTITUTIONAL CONTROLS FOR AREAS OF CONTAMINATION EXCEEDING ACTION LEVELS

As part of the Pre-Design phase, Settlers shall define the areas of the Site where contamination is found in levels equal to or exceeding the action levels (see Appendix I, Part E.2.a(2)(a)). Settlers shall delineate both the areal extent and depth below the surface of contamination that exceeds action levels, as well as the areas of the Site containing significant quantities of hide wastes. Any additional sampling necessary to delineate such areas shall be performed to a depth of at least thirty-six (36) inches beneath the surface but in general need not exceed forty-eight (48) inches beneath the surface unless the results of sampling indicate the presence of an undefined area of contamination above action levels at greater depths. Different Institutional Controls may be developed dependent upon whether an area contains hide wastes, and dependent upon the depth below the surface of the contamination.

Settlers shall design Institutional Controls to include such controls, regulations, and mechanisms as are necessary to address situations resulting from actual or anticipated events or

practices on individual or collective properties within the Site, or resulting from particular geographic or topographic conditions or conditions relating to the presence of structures, infrastructure, or other man-made features on particular properties within the Site. Institutional Controls shall include restrictive covenants which shall run with the land and be binding on all heirs, successors and assigns of the Settlers that own, occupy, or control property at the Site, and which shall benefit and be enforceable by EPA and the Commonwealth. Settlers shall design Institutional Controls to ensure that covenants to comply with Institutional Controls run with the land and are enforceable against future owners or operators of, or others with possessory interests in, the land.

The design of Institutional Controls shall take into account the public interest in assuring that public utility companies and governmental authorities charged with public safety are able to take immediate action to respond to emergencies on the Site, and to take timely action to repair and maintain facilities on the Site, as well as the public interest in minimizing or avoiding any interruption in utility service.

In designing Institutional Controls for those areas of the Site where contamination exceeds the action levels specified in the ROD, Settlers shall consider the following requirements:

- 40 CFR 264.12(c): Required notices.
- 40 CFR 264.14: Security.
- 40 CFR 264.15: General inspection requirements.

- 40 CFR 264.51: Purpose and implementation of contingency plan.
- 40 CFR 264.52(a), (c), (d), (f): Content of contingency plan.
- 40 CFR 264.53: Copies of contingency plan.
- 40 CFR 264.54: Amendment of contingency plan.
- 40 CFR 264.55: Emergency coordinator.
- 40 CFR 264.56(a)(2), (b), (c), (d), (g), (j): Emergency procedures.
- 40 CFR 264.73(a), (b)(4)&(5): Operating record.
- 40 CFR 264.111: Closure performance standard.
- 40 CFR 264.116: Survey plat.
- 40 CFR 264.117: Post-closure care and use of property.
- 40 CFR 264.118: Post-closure plan; amendment of plan.
- 40 CFR 264.119: Post-closure notices.
- 40 CFR 264.309: Surveying and recordkeeping.
- 40 CFR 264.310(b)(1), (4) & (5): Closure and post-closure care.

For the purpose of this Consent Decree, "final cover" as used in 40 CFR § 264.310(b)(1) shall include the caps and all other ground-covering features, and "other events" as used in 40 CFR § 264.310(b)(1) shall include, but not be limited to, the following activities occurring in developed areas of the Site:

1. Activities related to expansion of facilities (e.g., buildings) involving surface and/or subsurface work.
2. Maintenance of facilities (e.g., buildings, foundations).
3. Maintenance, repair, expansion, or development of utilities (e.g., water, electric, gas, sewer services).
4. Maintenance, repair, expansion, or development of public or private access ways such as roads, driveways, parking lots, and pedestrian walkways.
5. Maintenance, repair, expansion, or development of facilities on rights of ways such as rail lines, power transmission lines, or sewer or drain systems.
6. Installation, maintenance, repair, or removal of underground storage facilities such as fuel tanks and waste disposal holding tanks.

7. Emergency situations requiring response by government agencies, property owners, or operators of facilities (such as electric transmission lines and pipelines).

As part of the design of Institutional Controls, Settlers shall design for approval by EPA and the Commonwealth a plan and schedule for the Inauguration of Institutional Controls (as defined in Section III.K of this Consent Decree). The procedures and schedules by which the Institutional Controls, as approved, amended, or developed by EPA and the Commonwealth, will be administered, implemented, and complied with following Inauguration, shall be specified in the Operation and Maintenance Plan developed under this Consent Decree.

D. DISTURBANCE OR MODIFICATION OF THE REMEDIAL MEASURES

1. Definition of Disturbances or Modifications

During the Remedial Design phase, Settlers shall identify those types of actions involving disturbance or modification of the caps, Cap Equivalents, or soil that are likely to affect the continued effectiveness of the Remedial Action. Settlers may also define classes of disturbance or modification, dependent upon the size of the area affected, the potential for exposure to contaminants, or other factors.

2. Authorization for Disturbance or Modification

The Institutional Controls shall contain a mechanism or mechanisms for authorization by EPA and the Commonwealth of disturbances or modifications of the caps, Cap Equivalents, or soil. The mechanism(s) shall require the landowner or other person proposing the disturbance or modification to satisfy EPA and the Commonwealth that the proposed action will ensure the continued effectiveness of the Remedial Action and the protection of human health and the environment. The general authorization mechanism(s) shall contain the following requirements:

- a. that the person proposing the disturbance or modification provide advance notification to EPA and the Commonwealth of the planned disturbance or modification. This advance notification shall include appropriate plans, specifications, schedules, documents, or other information necessary to enable EPA and the Commonwealth to determine whether the proposed action, as well as all construction or other activities undertaken to implement the proposed action, will ensure the continued effectiveness of the Remedial Action and protection of human health and the environment;
- b. that the person proposing the disturbance or modification bear the burden of proof with respect to the determination described in the preceding paragraph;
- c. that EPA or its designee and the Commonwealth have the authority to approve or disapprove the proposed action, or to condition approval upon modification of the proposed action;
- d. that the proposed action be implemented only in accordance with the plans, specifications, or other documents approved or approved as modified by EPA or its designee and the Commonwealth in accordance with the preceding paragraph; and
- e. that the person proposing the disturbance or modification demonstrate financial ability to complete the

proposed action in accordance with the approved plans, specifications, or other documents.

However, dependent upon the type or circumstances of the disturbance or modification, categorical exceptions, exceptions conditioned upon compliance with standard procedures, or other streamlined procedures may be proposed for approval by EPA and the Commonwealth.

If EPA or the Commonwealth disapproves or conditionally approves a proposed action, EPA or the Commonwealth as appropriate will provide a written explanation for its action.

## II. INSTITUTIONAL CONTROLS FOR AREAS OF CONTAMINATION BELOW ACTION LEVELS

For all areas of the Site where metals contamination (arsenic, lead, and/or chromium) is below the action levels specified in the Record of Decision, the Institutional Controls shall require prior written notice to the Commonwealth before soils are disturbed, moved, or excavated at the Site. The notice shall describe the nature and location of such disturbance, movement, or excavation, as well as the nature, location, and method of disposal of all excavated soils. This notice requirement shall apply only to a disturbance, movement or excavation of a volume of soil which exceeds an amount to be defined during Remedial Design.

During Remedial Design, Settlers other than the Mark-Phillip Trust may propose one or more areas to be used as a consolidation



area (the "Consolidation Area"), which shall be the only location(s) on the Site (other than the area of excavation) for the disposal of soils excavated from the Site which contain metals contamination below the action levels specified in the Record of Decision. The area proposed for use as the Consolidation Area shall not be an area in which such use would (1) increase the potential for migration of Hazardous Substances from the proposed area, (2) increase the likelihood of human exposure to Hazardous Substances, or (3) adversely affect the design, construction, continued effectiveness, or operation and maintenance of the Work. The selection and location(s) of the Consolidation Area are subject to approval by EPA and the Commonwealth during Remedial Design. In proposing the Consolidation Area, Settlers other than the Mark-Phillip Trust shall propose a plan for the closure of said area for approval by EPA and the Commonwealth. EPA and the Commonwealth may place additional conditions on the use of the area(s) selected as the Consolidation Area. Once the Consolidation Area is approved, any soils excavated from the Site shall remain at the site of excavation unless they are relocated to the Consolidation Area as provided herein or unless the Commonwealth otherwise approves in writing. The soils placed in the Consolidation Area may not be removed without the prior written approval of the Commonwealth.

Soils excavated from the Site containing metals contamination below the action levels specified in the Record of

Decision are the only materials that may be disposed of in the Consolidation Area. The Consolidation Area may not be used for the disposal of other materials, including without limitation hides or hide components in other than a de minimis amount or that emit odors, construction and demolition debris and other solid waste. To prevent such improper disposal, the Consolidation Area shall be adequately secured. Such security should also be adequate to prevent public access to the Consolidation Area.

During Remedial Design, EPA and DEQE shall determine the maximum capacity of the Consolidation Area. If the maximum capacity of the Consolidation Area is reached, all soils at the Site containing metals contamination below the action levels specified in the Record of Decision which are excavated thereafter shall remain at the site of excavation or be disposed of by a method and at a location which are subject to the prior written approval of the Commonwealth. Closure of the Consolidation Area shall take place not later than seven years after certification of completion of the Remedial Action or within ninety days after the date the maximum capacity of the Consolidation Area is reached, whichever comes first.

In the event that EPA or the Commonwealth determines that soils placed in the Consolidation Area present (1) an increased potential for migration of Hazardous Substances from the Consolidation Area, (2) a material increase in the risk of human

exposure to Hazardous Substances, or (3) an adverse effect upon the design, construction, continued effectiveness, or operation and maintenance of the Work, Settlers other than the Mark-Phillip Trust shall take appropriate actions to eliminate this increased potential for migration, material increase in the risk of human exposure to Hazardous Substances, and/or the adverse effect on the Work. In addition, all disposal in the Consolidation Area shall cease unless and until the Commonwealth, in consultation with EPA, determines that the increased potential for migration, material increase in the risk of human exposure to Hazardous Substances, and/or the adverse effects on the Work no longer exist and the placement of additional soils in the Consolidation Area will not materially increase the potential for migration, risk of human exposure to Hazardous Substances or adversely affect any aspect of the Work.

The requirements set forth in this part II shall be the only Institutional Controls applicable to areas of the Site where metals contamination is below the action levels specified in the Record of Decision.

ATTACHMENT C  
PROJECT OPERATIONS PLAN

The Project Operation Plan (POP) shall be designed to ensure that all remedial activities under this Consent Decree will be conducted in accordance with the applicable requirements of the National Contingency Plan (NCP), 40 CFR Part 300, and the guidelines of the EPA Remedial Investigation (RI) and Feasibility Study (FS) guidance documents and Data Quality Objectives (OSWER Directive 9355.0-7A, Oct. 17, 1986). Should there be any inconsistencies between the NCP and the EPA guidance documents, the NCP shall control. The POP shall be based on the regulations and EPA guidance in effect on the date of entry of this Consent Decree. The POP shall include an overall site specific Health and Safety Plan, a Quality Assurance/ Quality Control Plan, and a Sampling and Analytical Plan. Settlers shall conduct all work under this Consent Decree in accordance with the POP as approved, amended or developed by EPA in consultation with the Commonwealth. The specific requirements of these plans are outlined in Parts A, B, and C below.

A. SITE SPECIFIC HEALTH AND SAFETY PLAN

1. A site specific Health and Safety Plan (HSP) shall be prepared to address potential hazards to the field remedial team and the surrounding community potentially impacted by site activities. This plan shall be consistent with the applicable guidelines of EPA's Health and Safety Planning for Remedial

Investigations, Guidance on Remedial Investigations under CERCLA, (EPA/540/G-85/002, June 1985,) and the requirements of the Occupational Safety and Health Administration (OSHA) Guidelines for Hazardous Waste Operations and Emergency Response Activities (interim final rule, 29 CFR Part 1910 as amended, Federal Register Vol. 51, No. 244, Dec. 19, 1986).

The HSP shall be adequate to assure the safety of the field team and the industrial/commercial and residential communities during all activities conducted pursuant to the Consent Decree. Contingency plans shall be developed to address situations which may likely impact the off-site communities.

2. The Health and Safety Plan shall address at a minimum the following items:

- a. personal protective equipment requirements;
- b. on-site monitoring equipment requirements;
- c. safe working procedures specifications;
- d. equipment decontamination procedures;
- e. personnel decontamination procedures; and
- f. special and emergency procedures including contingency plans.

B. PROJECT ACTIVITIES QUALITY ASSURANCE/QUALITY CONTROL PLAN

A Quality Assurance/Quality Control (QA/QC) Plan shall be prepared to specify the procedures to be used in all sampling and analyses, and reporting performed pursuant to the Consent Decree. The QA/QC plan shall be prepared in accordance with the EPA guidance document QAMS-005/80 and Data Quality Objectives guidance documents EPA/540/G-87/003 and 004 (March 1987). At a minimum the following topics shall be addressed in the QA/QC Plan:

1. quality assurance objectives for measurement data, stated in terms of precision, accuracy, completeness, representativeness, correctness, and comparability;
2. sampling procedures;
3. sample chain-of-custody procedures;
4. field and analytical equipment, calibration procedures, references, and frequency;
5. internal quality control checks and frequency;
6. quality assurance performance audits, system audits, and frequency of implementation and non-conformance reports;
7. quality assurance reports;
8. preventive maintenance procedures and schedule;
9. specific data validation procedures to be used to assess routinely data precision, representativeness, comparability, accuracy, and completeness of specific measurement parameters involved; and

10. procedures for corrective actions.

C. SAMPLING AND ANALYTICAL PLAN

The sampling and analytical plan shall specify the procedures to be followed for all samples to be taken pursuant to this Consent Decree and at a minimum shall address the following:

1. objectives of the sampling effort;
2. type, location, rationale and construction specifications for placement of existing and proposed monitoring wells, well screens and borings; and type, location and rationale for soil, sediment and surface water sampling locations;
3. type, quantity, frequency, and location of samples to be collected;
4. sampling methods to be used including well sampling and evaluation procedures, split spoon sampling, sampling preservation techniques, equipment needs, and equipment cleaning and decontamination procedures, and field support requirements;
5. sample shipping and chain-of-custody procedures;
6. type of analysis to be run on each sample including referencing appropriate EPA approved/specified analytical methods; and
7. a discussion of chemical constituents of interest and historical ranges of concentrations based on available data.

## ATTACHMENT D

### PROJECT SCHEDULE AND REMEDIAL DESIGN/ACTION MILESTONES

#### A. INTRODUCTION AND PURPOSE

It is the purpose of this Attachment to specify major and minor milestones for purposes of Paragraphs XIX and XXI of the Consent Decree as well as to specify other scheduled events in the remedial design/action process.

#### B. SCHEDULE AND MILESTONES

With respect to the events set listed below, those marked with the designator "(M)" are major milestones and those marked with the designator "(m m)" are minor milestones for purposes of sections XIX and XXI of the Consent Decree.

##### 1. Pre-design

- (a) Completion of inspection of Site security fence. (m m)

Due Date: Fifteen (15) days after entry of the Consent Decree.

- (b) Implement repairs to Site security fence. (m m)

Due Date: Within thirty (30) days after completion of security fence inspection.

- (c) Settlers will propose alternative cap design.

Due Date: Within thirty (30) days after entry of this Consent Decree.

- (d) Submission of the name and qualifications of the proposed Remedial Design short list of bidders. (m m)

Due Date: Within fifteen (15) days of the effective date of this Consent Decree.



(e) EPA will notify Settlers of approval or disapproval of the proposed Remedial Design short list of bidders.

Expected Date: Within fifteen (15) days after EPA and the Commonwealth receive the names and qualifications of the proposed contractors.

(f) EPA will notify Settlers of approval or disapproval of alternative cap design.

Due Date: Within one hundred eighty (180) days after entry of the Consent Decree.

(g) Submission of the name of the selected Remedial Design contractor. (m m)

Due Date: Within ninety (90) days after receipt of EPA approval of the remedial design short list of bidders.

(h) Submission of the Pre-Design Work Plan consistent with Appendix I, Part E.2. (M)

Due Date: Within sixty (60) days after the date EPA receives notification of the selected remedial design contractor.

(i) EPA will notify Settlers of approval or disapproval of the Pre-Design Work Plan submitted by the Settlers.

Expected Date: Within twenty-one (21) days after EPA receives Settlers' submitted plan.

(j) Commence field activities related to additional studies consistent with the approved Pre-Design Work Plan referred to above. (m m)

Start Date: Within thirty (30) after receipt of EPA approval of the Pre-Design Work Plan.

(k) Submission of Remedial Design Work Plan consistent with Appendix I Part E.4. (M)

Due Date: Within seventy five (75) days after receipt of EPA approval of the Pre-Design Work Plan.

(l) EPA will notify Settlers of approval or disapproval of the Remedial Design Work Plan submitted by the Settlers.

Expected Date: Within forty-five (45) days after EPA

receives the Generator's submitted plan.

(m) Submission of the reports describing the additional studies and results of those studies. (m m)

Due Date: Within a certain number of days to be specified by EPA, as part of EPA and Commonwealth approval of the Pre-Design Work Plan.

## 2. Design

(a) Settlers commence Remedial Design activities pursuant to approved Remedial Design Work Plan. (m m)

Start Date: Within ten (10) days after receipt of the approved Remedial Design Work Plan.

(b) Submission of the deliverables for the 30%, 60%, and 95% design documents in accordance with Appendix I Part E.4.a.(2)(a)-(c).

Due Date: At the time specified by EPA as part of EPA and Commonwealth approval of the Remedial Design Work Plan.

(c) Submission of the final 100% design documents consistent with Appendix I Part E.4.a.(2)(d) and the approved Remedial Design Work Plan. (M)

Due Date: At the time specified by EPA as part of EPA and Commonwealth approval of the intermediate design documents.

## 3. Remedial Action

(a) Submission of the name of the selected Remedial Action contractor. (m m)

Due Date: Within one hundred twenty (120) days after receipt of EPA approval of the final Remedial Design.

(b) Submission of the Remedial Action Work Plan. (M)

Due Date: Within sixty (60) days after EPA receives the notification of the selected Remedial Action contractor.

(c) Initiate site remedial activities in accordance with the Remedial Action Work Plan and schedules contained therein.

(m m)

Due Date: Within sixty (60) days after receipt of EPA approval of the Remedial Action Work Plan.

(d) Specific Remedial Action milestones, not to exceed six, will be established by EPA in consultation with the Commonwealth based on the activities and timetable proposed in the Remedial Action Work Plan. (all m m)

(e) Completion of all construction. (M)

Due Date: At the time specified in the Remedial Action Work Plan approved by EPA.

(f) Submission of notification by Settlers of expected completion.

Due Date: Upon completion of construction.

(g) EPA notifies Settlers of items necessary for completion of on-site construction work.

Expected Date: Within thirty (30) days after receipt of notification of expected completion.

(h) Performance of items necessary for completion. (M)

Due Date: At a time specified by EPA in EPA's notice of items necessary for completion.

(i) Settlers shall submit final remedial construction report. (M)

Due Date: At a time specified by EPA in EPA's notice of items necessary for completion.

#### 4. GSIP

(a) Submission of the GSIP Work Plan consistent with Attachment H. (m m)

Due Date: Sixty (60) days after EPA receives the name of the selected remedial design contractor.

(b) Commence field activities related to the GSIP consistent with the approved GSIP Work Plan referred to above. (m m)

Start Date: Within a certain number of days to be

specified by EPA, as part of EPA and Commonwealth approval of the GSIP Work Plan.

(c) Submission of the reports describing the GSIP and the investigation results. (m m)

Due Date: Within a certain number of days to be specified by EPA, as part of EPA and Commonwealth approval of the GSIP Work Plan.

C. CREDIT FOR EARLY COMPLETION OF MILESTONE ITEMS

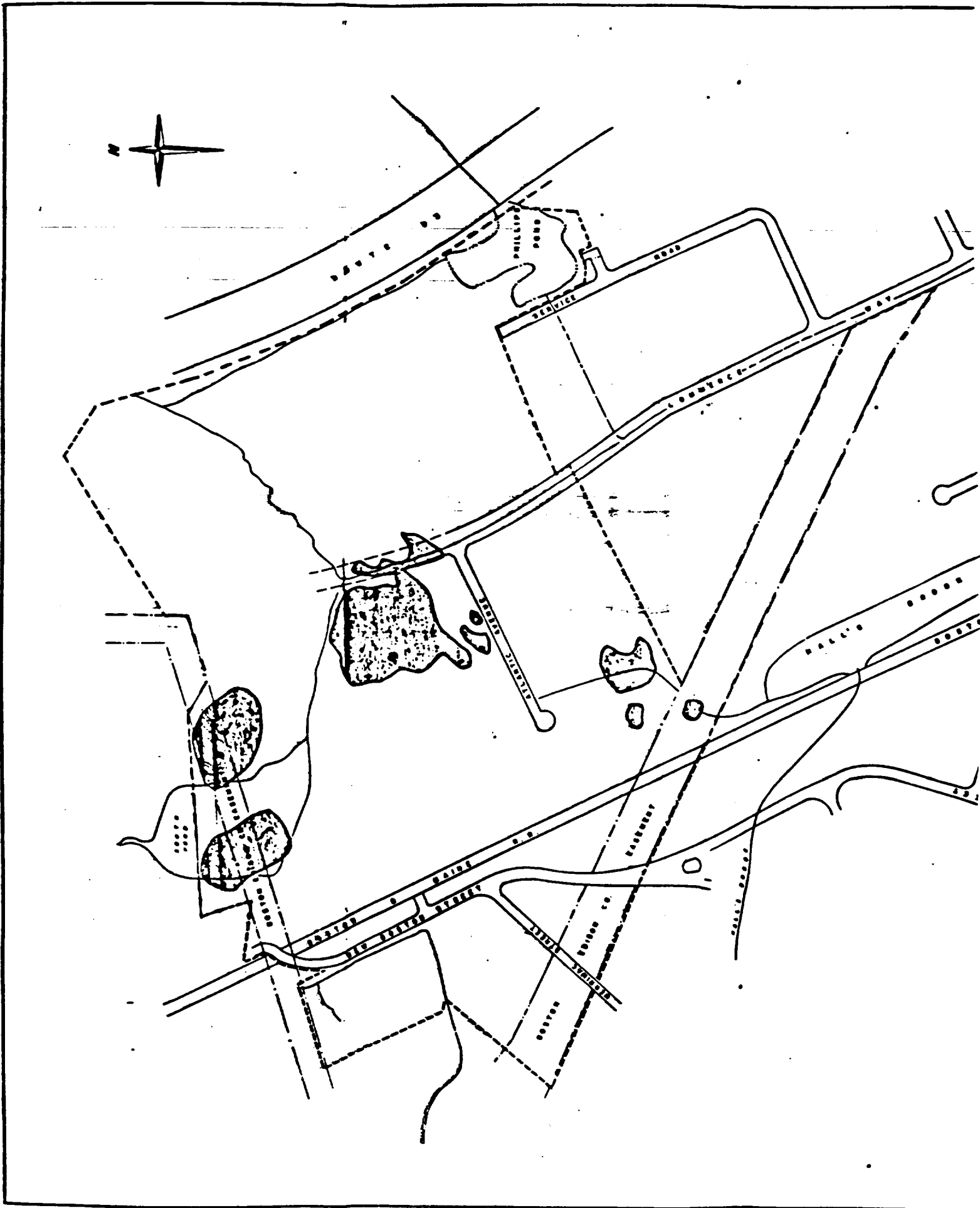
In the event that Settlers complete a minor milestone (m m) item earlier than the scheduled date of completion, they may to the extent provided in this section accumulate the number of days that the milestone was completed early and apply such days as credit to extend the time permitted to achieve subsequent minor milestones. This provision applies only to items specified above to be minor milestones (those designated "m m"). The following procedures and restrictions shall apply:

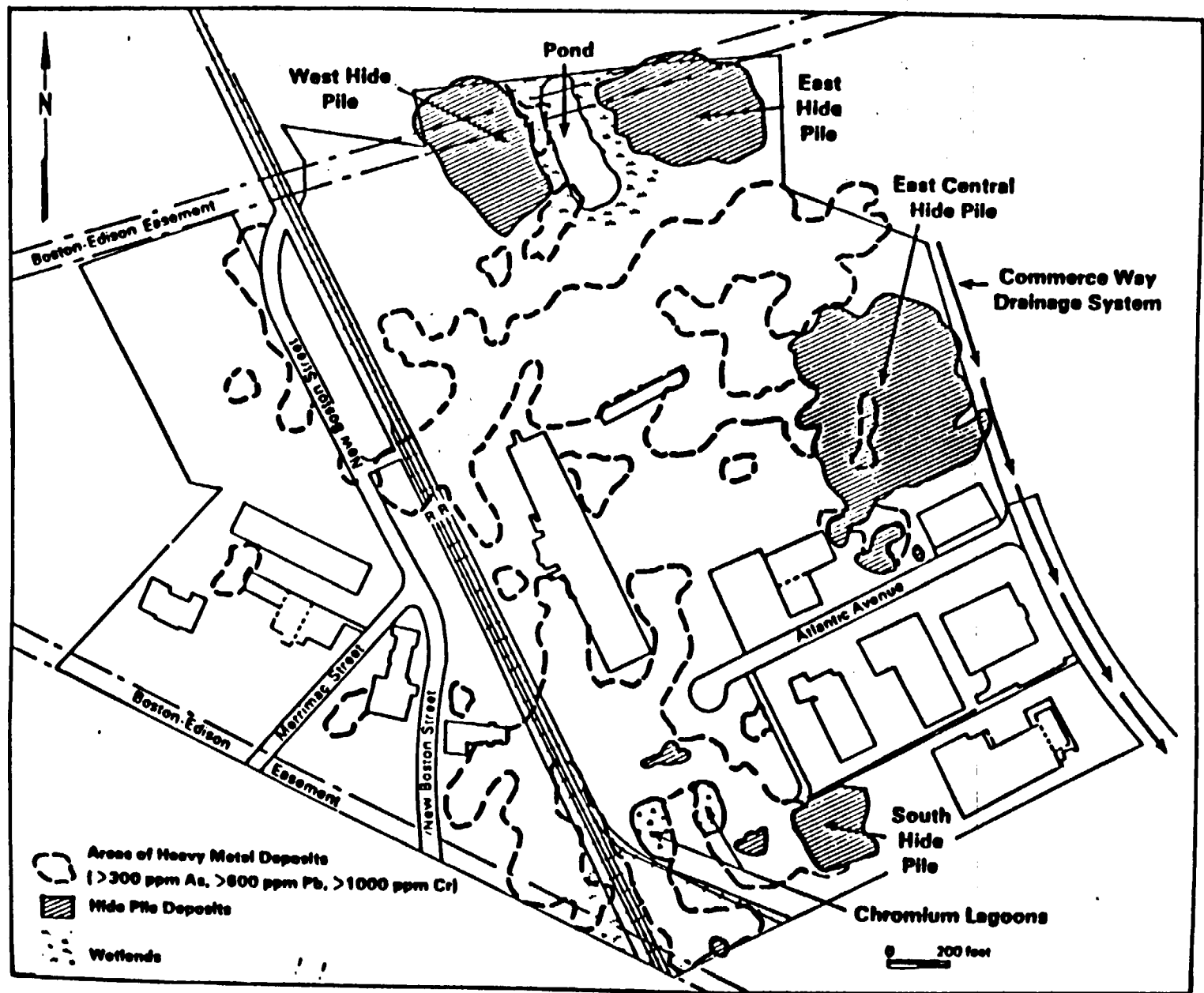
1. Settlers may take credit for no more than ten days of early completion for each milestone.

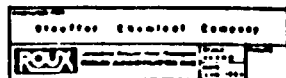
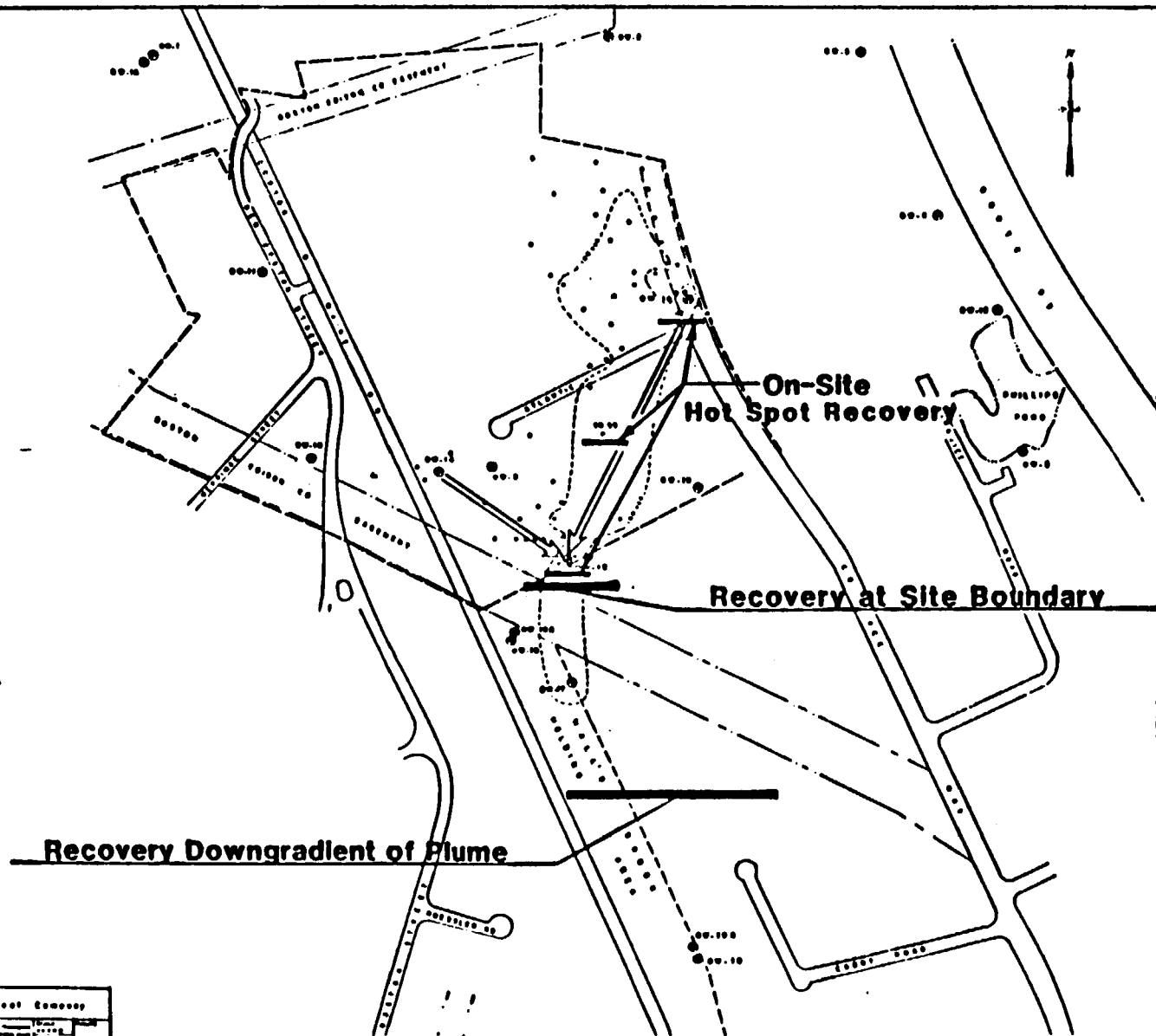
2. Settlers may accumulate no more than a total of twenty days of early completion credit at any given time. Settlers lose any potential additional early completion credit until the accumulated credit is reduced to less than twenty days.

3. Settlers may apply no more than ten days of accumulated credit to extend the time to complete any subsequent milestone.

4. Settlers must accumulate early completion credit before such credit may be applied to extend the time to complete subsequent milestones. Settlers may not claim credit in anticipation of early completion of subsequent milestones.







**MALCOLM**  
DICKIE

**LEGEND:**  
 ----- EXTENT OF BENZENE AND TOLUENE @ 100mg/L  
 ----- CONTAMINATED AREA A  
 • PLUME DEFINITION WELL  
 → DIRECTION OF GROUNDWATER FLOW

STAUFFER CHEMICAL COMPANY  
 WOBURN, MASS.  
**GROUNDWATER RECOVERY  
 ALTERNATIVES**

ATTACHMENT H  
GROUNDWATER/SURFACE WATER INVESTIGATION  
SCOPE OF WORK

A. PURPOSE AND OBJECTIVE

This attachment outlines the requirements of the Groundwater/Surface Water Investigation Plan (GSIP) that will be developed and implemented by the Settlers. The GSIP has two objectives: 1) evaluation of the potential for future, off-site migration of metals through the surface water pathway and 2) collection of information needed by EPA for the site-related portion of the Multiple Source Groundwater Response Plan (MSGWRP) required in the September 1986 Record of Decision (ROD).

B. METALS MOBILITY

This portion of the GSIP will determine the factors that govern the mobility of arsenic, chromium, lead and mercury at the Woburn Industri-plex site. At a minimum, this investigation will consist of the following:

(1) Determination of the environmental mobility and fate of arsenic, chromium, lead and mercury by evaluation of the literature.

(2) Evaluation of the existing arsenic, chromium, lead and mercury data base and collection of any additional information needed to complete Task 3.

(3) Identification of the critical parameters controlling the mobility of arsenic, chromium, lead and mercury. These parameters are likely to include pH, Eh, soil



surface area, etc. Bench-scale testing may be necessary to identify these critical parameters.

(4) Measurement of the critical parameters controlling the mobility of arsenic, chromium, lead and mercury in groundwater. These measurements will be made on at least two occasions that reflect the extremes of annual surface water and groundwater conditions likely to be encountered at the site, i.e. seasonal high levels and seasoned low levels.

(5) Determination of the chemical species of arsenic, chromium, lead and mercury present in groundwater at the site, if necessary.

(6) Evaluation of the current and future mobility of arsenic, chromium, lead and mercury at the site based on the information obtained in Tasks 1, 2, 3, 4, and 5.

(7) Evaluation of the environmental risks created by future off-site migration of arsenic, chromium, lead and mercury.

#### C. GROUNDWATER INVESTIGATION

The groundwater investigation program outlined below is a preliminary scope of activities proposed to provide site-specific information that can be incorporated by EPA into the Multiple Source Ground Water Response Plan (MSGWRP) required in the September 1986 Record of Decision (ROD). The scope is consistent with fundamental objectives of the MSGWRP to evaluate on-site and

off-site conditions, identify and characterize possible source areas and define the upgradient aquifer conditions influencing groundwater quality in that portion of the aquifer investigated during the Stauffer study.

To ensure technical and cost effectiveness the program shall be conducted in two phases as outlined below.

Phase I

Two proposed additional monitoring well locations approximately shown on Figure 2 have been selected to evaluate groundwater conditions upgradient of the Site or in proximity to specific locations considered possible contaminant source areas. Conditions in these areas are unknown.

Groundwater levels will be measured in all on-site wells and a groundwater elevation and flow direction map will be compiled from this information. On-site surface water elevations will be taken into account when compiling this map.

Groundwater samples will be collected from the two new monitoring wells and the existing groundwater monitoring wells and analyzed for inorganic, volatile organic and semi-volatile organic compounds as listed on Attachment 1. Standard water quality measurements (pH, hardness, temperature, dissolved oxygen, conductivity, and suspended solids) will be taken at each sample location. In addition to the standard inorganic analysis, an evaluation of the chemical forms of arsenic, lead,

chromium and mercury shall be made, if necessary based on the results of the mobility studies under section B, above.

The results of the groundwater and surface water/sediment studies shall be reviewed to evaluate their interrelationship if any and develop a more complete understanding of the aquifer. The result of the phase I activities should provide for a better understanding of the aquifer and the relationship between various contaminant source areas and the quality of the ground water migrating off-site to receptors south of route 128.

#### Phase II

The scope of phase II activities if any are necessary will be developed following a review of phase I information. Phase II activities may include additional well installation and additional rounds of groundwater sample collection and analysis.

#### C. SURFACE WATER AND SEDIMENT INVESTIGATION

The surface water and sediment sampling program outlined below is a preliminary scope of activities necessary to evaluate the extent and character of contamination in the surface drainage system on-site and in the surrounding areas of the drainage basin both up and down-gradient of the site.

This program is consistent with the objectives of the MSGWRP required in the September 1986 ROD. It will also serve to address several concerns and recommendations regarding natural

resources impacts presented by the U.S Department of Commerce - National Oceanic and Atmospheric Administration (DOC-NOAA), in a letter dated May 6, 1987.

To ensure technical and cost effectiveness this program will be conducted in two phases as described below.

#### Phase I

Phase I activities will include surface water and sediment sampling at or near the locations shown on Figure 1. Specific locations for all samples will be selected in the field based on direct observations of stream flow conditions and depositional patterns. If trunk sewer lines pass through the site, two sample locations will be selected for each trunk sewer to determine the character of the water and sediments contained in them. Trunk sewer sampling locations will depend upon access and permission from the POTW.

Sample analysis will include inorganic (including tin), volatile organic compounds and semi-volatile organic compounds as listed on Attachment 1. Laboratory detection limits shall be established to ensure proper evaluation of the results in terms of available standards and criteria. In addition to the standard inorganic analysis, an evaluation of the chemical forms of arsenic, lead, chromium and mercury shall be made, if necessary based on the results of the mobility studies under section B, above. These additional analyses shall be made on both water and

sediment samples. Standard water quality measurements (ph, hardness, temperature, dissolved oxygen, conductivity and suspended solids) will be taken at each sample location.

Two surface water samples, filtered and unfiltered, will be obtained at each sample location. This will allow for a comparison of water quality relative to the transport of contaminants dissolved in surface waters versus contaminants transported in suspension.

Stream flow, rate and volume, shall be measured at each sampling location.

During the course of field activities an inventory of existing discharges (pipes, ditches, etc.) shall be developed and mapped. Any observed condition, practice or operation shall be noted and evaluated in terms of its significance to the basin drainage.

#### Phase II

The scope of any necessary phase II activities will be developed in detail following a review of phase I data. Phase II may include additional sampling north and possibly south of Mishawum Road and biological sampling and analysis to evaluate bio-accumulation of contaminants. Organo-tin compounds shall be evaluated if tin is detected in phase I sampling at significant concentrations.

D. GSIP WORK PLAN

a. Within sixty (60) days after EPA receives the name of the selected remedial design contractor, Consent Decree Settlers shall submit a GSIP Work Plan to EPA and the Commonwealth for review and approval. The GSIP Work Plan shall specify and describe all tasks and investigations to be undertaken in connection with the Groundwater/Surface Water Investigation and shall include a proposed timetable for completion of the investigation and submittal of a draft and final report. The GSIP Work Plan shall include at a minimum:

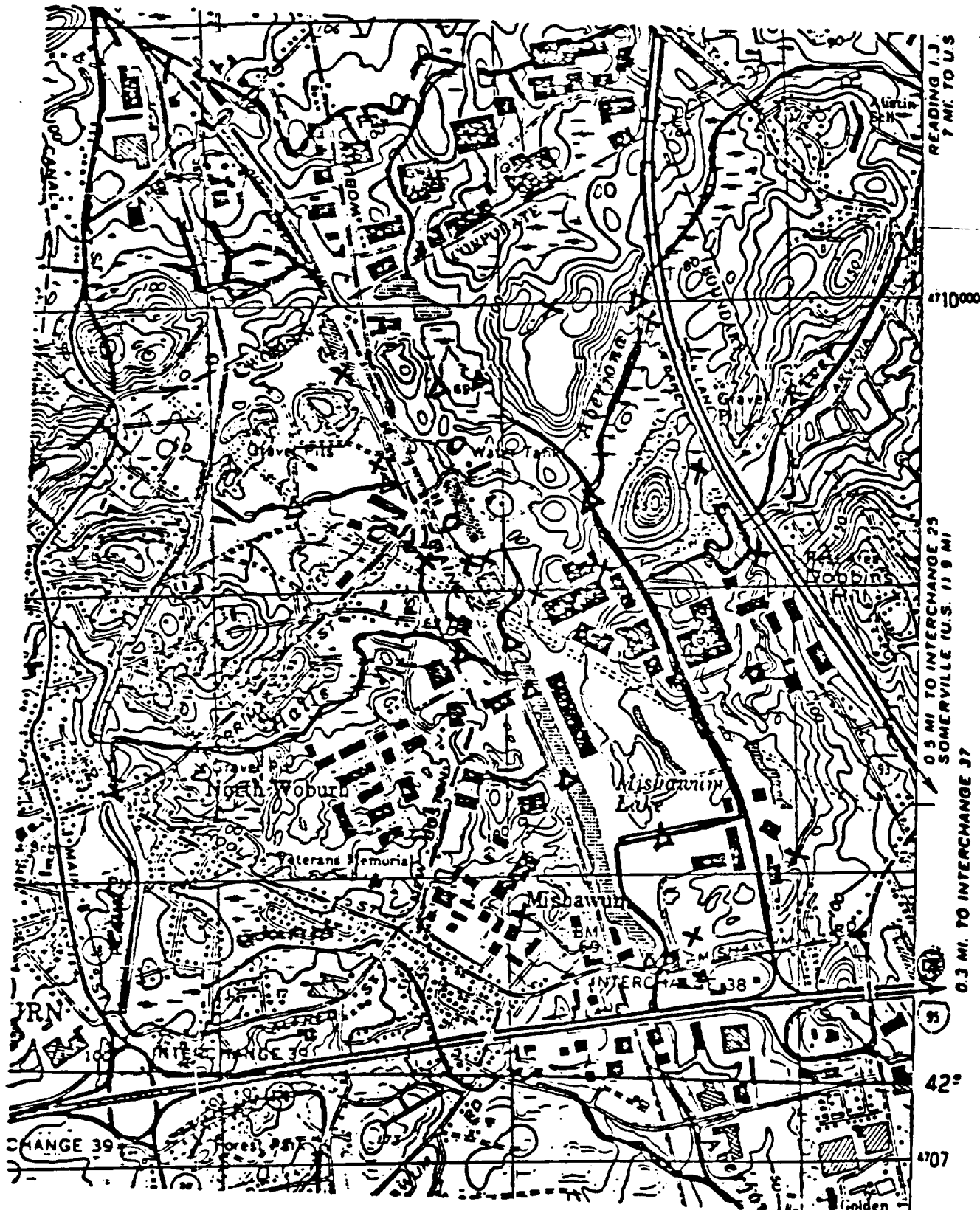
(1) A summary of existing data, including site location, topography and drainage, site hydrogeology, and existing groundwater, surface water and sediment analytical data.

(2) A determination of the overall objectives of the GSIP and of the specific data quality objectives.

(3) A task plan for the investigation to encompass:

- (a) project planning and management;
- (b) monitoring well installation;
- (c) media sampling;
- (d) sample analysis and validation;
- (e) data evaluation; and
- (f) submittal of draft and final reports.

GSIP -  
FIGURE 1



- — — — — Approx. Boundary of Mishawum Watershed
- X Existing Wells
- O Proposed Wells
- Δ Surficial Water/Sediment Sampling Points

b. The following requirements and guidelines shall also be considered in preparation and implementation of the GSIP:

- (1) The NCP, 40 C.F.R. Part 300 as amended.
- (2) Data Quality Objectives for Remedial Response Activities, EPA/540/G-87/003 and 004, March 1987.
- (3) A Compendium of Superfund Field Operations Methods, EPA/540/P-87/001a and 001b, August 1987.
- (4) Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, OSWER Directives #9355.301
- (5) The Project Operations Plan as developed under this Consent Decree.

E. IMPLEMENTATION OF THE GSIP

Within ten (10) days after receipt of the GSIP Work Plan as approved, amended or developed by EPA the Settlers shall perform the activities set forth therein accordance with the specified time tables.



# Attachment I

Form 1

U.S. EPA Contract Laboratory Program  
Sample Management Office  
P.O. Box 818 - Alexandria, VA 22313  
703/557-2490 FTS: 8-557-2490

EPA Sample No. \_\_\_\_\_

Date \_\_\_\_\_

## INORGANIC ANALYSIS DATA SHEET

LAB NAME \_\_\_\_\_

CASE NO. \_\_\_\_\_

SOL NO. \_\_\_\_\_

Lab Receipt Date \_\_\_\_\_

LAB SAMPLE ID. NO. \_\_\_\_\_

QC REPORT NO. \_\_\_\_\_

### Elements Identified and Measured

Concentration: Low \_\_\_\_\_ Medium \_\_\_\_\_  
Matrix: Water \_\_\_\_\_ Soil \_\_\_\_\_ Sludge \_\_\_\_\_ Other \_\_\_\_\_

ug/L or mg/kg dry weight (Circle One)

1. <u>Aluminum</u>	13. <u>Magnesium</u>
2. <u>Antimony</u>	14. <u>Manganese</u>
3. <u>Arsenic</u>	15. <u>Mercury</u>
4. <u>Barium</u>	16. <u>Nickel</u>
5. <u>Beryllium</u>	17. <u>Potassium</u>
6. <u>Cadmium</u>	18. <u>Selenium</u>
7. <u>Calcium</u>	19. <u>Silver</u>
8. <u>Chromium</u>	20. <u>Sodium</u>
9. <u>Cobalt</u>	21. <u>Thallium</u>
10. <u>Copper</u>	22. <u>Vanadium</u>
11. <u>Iron</u>	23. <u>Zinc</u>
12. <u>Lead</u>	Percent Solids (2) _____
Cyanide _____	

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Lab Manager \_\_\_\_\_

Sample Number

Organics Analysis Data Sheet  
(Page 1)

Laboratory Name: \_\_\_\_\_ Case No: \_\_\_\_\_  
Lab Sample ID No: \_\_\_\_\_ QC Report No: \_\_\_\_\_  
Sample Matrix: \_\_\_\_\_ Contract No: \_\_\_\_\_  
Data Release Authorized By: \_\_\_\_\_ Date Sample Received: \_\_\_\_\_

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: \_\_\_\_\_

Date Analyzed: \_\_\_\_\_

Conc/Dil Factor: \_\_\_\_\_ pH: \_\_\_\_\_

Percent Moisture: \_\_\_\_\_

Percent Moisture (Decanted): \_\_\_\_\_

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-08-2	Methylene Chloride	
67-64-1	Acetone	
75-15-0	Carbon Disulfide	
75-35-4	1,1-Dichloroethane	
75-34-3	1,1-Dichloroethane	
156-60-5	Trans-1,2-Dichloroethane	
87-86-3	Chloroform	
107-06-2	1,2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1,1,1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	
75-27-4	Bromodichloromethane	

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1,1,2,2-Tetrachloroethane	
78-87-5	1,2-Dichloropropene	
10061-02-8	Trans-1,3-Dichloropropene	
79-01-8	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1,1,2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1,3-Dichloropropene	
110-75-8	2-Chloroethoxyethyl ether	
75-25-2	Bromoform	
591-78-6	2-Hexanone	
108-10-1	4-Methyl-2-Pentanone	
127-18-4	Tetrachloroethene	
106-88-3	Toluene	
106-90-7	Chlorobenzene	
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

Data Reporting Guidelines

For reporting results to EPA, the following results guidelines are used.  
Additional flags or footnotes reporting results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration dilution factors. (This is not necessarily the appropriate detection limit.) The footnote should read: U. Compound was analyzed for but not detected. The number is the minimum necessary detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for a compound, or when the mass spectrometer indicates the presence of a compound that meets the detection limit but the result is less than the specified detection limit but greater than zero (e.g., 10U).

C This flag applies to pesticide compounds where the detection limit has been confirmed by GC/MS. Single component pesticides < 10 ug/l in the final extract should be confirmed by GC/MS.

B This flag is used when the sample is found in the blank as well as a sample. It indicates possible positive blank contamination and warns the data user to use appropriate action.

Other Other specific flags and footnotes may be reported to provide details on results. If used, they must be fully described and such data given priority in the data summary report.

Form 1

4-84

Sample Number

# Organics Analysis Data Sheet (Page 2)

## Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: \_\_\_\_\_

Date Analyzed: \_\_\_\_\_

Conc./Dil Factor: \_\_\_\_\_

CAS Number		ug/l or ug/kg (Circle One)
62-75-9	N-Nitrosodimethylamine	
106-55-2	Phenol	
62-53-3	Aniline	
111-44-4	bis(2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1,3-Dichlorobenzene	
106-48-7	1,4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
85-50-1	1,2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-84-7	N-Nitroso-Di-n-Propylamine	
87-72-1	Hexachlorobenzene	
98-95-3	Nitrobenzene	
78-59-1	Isoclorane	
88-75-5	2-Nitrophenol	
105-67-9	2,4-Dimethylphenol	
65-85-0	Benzoic Acid	
111-91-1	bis(2-Chloroethyl)Methane	
120-83-2	2,4-Dichlorophenol	
120-82-1	1,2,4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
85-06-2	2,4,6-Trichlorophenol	
95-95-4	2,4,5-Trichlorophenol	
91-58-7	2-Chloronaphthalene	
88-74-4	2-Nitroaniline	
131-11-3	Dimethyl Phthalate	
206-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	

CAS Number		ug/l or ug/kg (Circle One)
63-32-9	Acenaphthene	
51-28-5	2,4-Dinitrophenol	
100-02-7	4-Nitrophenol	
132-64-9	Dibenzofuran	
121-14-2	2,4-Dinitrotoluene	
625-20-2	2,6-Dinitrophenol	
64-86-2	Dimethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	
534-52-1	4,6-Dinitro-2-Methylphenol	
65-30-8	N-Nitrosodiphenylamine (1)	
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	
87-86-5	Pentachlorophenol	
25-01-8	Phenanthrene	
120-12-7	Anthracene	
64-74-2	Di-n-Butylphthalate	
206-44-0	Fluoranthene	
82-87-5	Benzidine	
129-00-0	Pyrene	
85-88-7	Butylbenzylphthalate	
91-84-1	3,3-Dichlorobenzidine	
56-55-3	Benzobenzanthracene	
117-81-7	bis(2-Ethylhexyl)phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzobenzofluoranthene	
207-08-9	Benzofluoranthene	
50-32-8	Benzopyrene	
183-39-5	Indenol 2,3-diPyrene	
53-70-3	Dibenzobenzanthracene	
181-24-2	Benzobenzoperylene	

(1)-Cannot be separated from diphenylamine

Sample Number

# Organics Analysis Data Sheet (Page 3)

## Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared \_\_\_\_\_

Date Analyzed \_\_\_\_\_

Conc/Dil Factor: \_\_\_\_\_

CAS Number		ug/l or ug/Kg (Circle One)
019-84-8	Alpha-BHC	
019-85-7	Beta-BHC	
019-86-8	Delta-BHC	
58-89-9	Gamma-BHC (Lindane)	
76-44-8	Heptachlor	
009-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	
72-55-8	4,4-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4,4-DDD	
7421-93-4	Endrin Aldehyde	
1031-07-8	Endosulfan Sulfate	
50-29-3	4,4-DDT	
72-43-5	Methoxychlor	
53494-70-5	Endrin Ketone	
57-74-9	Chlordane	
8001-35-2	Toxaphene	
12674-11-2	Aroclor-1016	
11104-28-2	Aroclor-1221	
11141-16-5	Aroclor-1232	
53469-21-9	Aroclor-1242	
12672-29-6	Aroclor-1248	
11097-69-1	Aroclor-1254	
11096-82-5	Aroclor-1260	

$V_i$  = Volume of extract injected (ul)

$V_e$  = Volume of water extracted (ml)

$W_s$  = Weight of sample extracted (g)

$V_t$  = Volume of total extract (ul)

$V_e$  \_\_\_\_\_ or  $W_s$  \_\_\_\_\_  $V_i$  \_\_\_\_\_  $V_t$  \_\_\_\_\_

### Tentatively Identified Compounds

[illegible]

NOTICE AND COVENANTS

GRANTOR:

GRANTEES:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, AND  
ITS SUCCESSOR AGENCIES ("EPA")

COMMONWEALTH OF MASSACHUSETTS, BY AND THROUGH THE  
DEPARTMENT OF ENVIRONMENTAL QUALITY ENGINEERING,  
AND ITS SUCCESSOR AGENCIES ("COMMONWEALTH")

STAUFFER CHEMICAL COMPANY; STAUFFER MANAGEMENT  
COMPANY; ICI AMERICAN HOLDINGS INC.; MONSANTO  
COMPANY; WILLIAM A. D'ANNOLFO, FRANK P. D'ANNOLFO,  
SHIRLEY J. MARTINEK, and JOHN A. DELROSSI, as the  
TRUSTEES of THE MARK-PHILLIP TRUST; ATLANTIC  
AVENUE ASSOCIATES, INC.; BOSTON EDISON COMPANY;  
THE BOYD CORPORATION; STEPHEN DAGATA and ADELINE  
DAGATA; MARY E. FITZGERALD and JOHN J. MULKERIN,  
as TRUSTEES OF THE NODRAER REALTY TRUST; HIRO K.  
GANGLANI and SUNDER K. GANGLANI; MICHAEL A.  
HOWLAND; MICHAEL A. HOWLAND, as TRUSTEE OF  
ATLANTIC AVENUE TRUST; LIPTON INDUSTRIES, INC.;  
RONALD F. LISS; MASSACHUSETTS BAY TRANSPORTATION  
AUTHORITY; RICHARD G. MIZZONI, METROPHANE ZAYKA,  
JR., NICHOLAS ZAYKA, and PETER ZAYKA, as TRUSTEES  
OF THE AERO REALTY TRUST; PAUL X. O'NEILL and  
PHYLLIS O'NEILL, as TRUSTEES OF THE P.X. REALTY  
TRUST; PEBCO COMPANY; POSITIVE START REALTY, INC.;  
AUGUSTINE P. SHEEHY; PETER J. VOLPE; THE WELLES  
COMPANY; WINTER HILL STOREHOUSE, INC.; CITY OF  
WOBURN; and WOODCRAFT SUPPLY CORPORATION  
(COLLECTIVELY, "SETTLERS")

THE INDUSTRI-PLEX SITE REMEDIAL TRUST, A MISSOURI  
TRUST U/D/T [], RECORDED AT MIDDLESEX SOUTH  
DISTRICT REGISTRY OF DEEDS AT BOOK \_\_\_\_\_, PAGE  
\_\_\_\_\_ ("REMEDIAL TRUST")

PROPERTY  
ADDRESS:

PROPERTY  
DESCRIPTION:

DATE:

**I. NOTICE OF OBLIGATION TO PROVIDE ACCESS TO PROPERTY.**

Grantor hereby gives notice that, in consideration of the obligations and covenants contained in a consent decree entered in the United States District Court for the District of Massachusetts in cases entitled United States v. Stauffer Chemical Company, Inc., Civil Action No. [], and Commonwealth of Massachusetts v. Stauffer Chemical Company, Inc., Civil Action No. [] (the "Consent Decree"), a copy of which has been recorded at the Middlesex South District Registry of Deeds at Book \_\_\_\_\_, Page \_\_\_\_\_, Grantor has granted access to the property described above (the "Property") for the purposes of performing and monitoring certain remedial actions required under the Consent Decree on, at, or for the Industri-plex Superfund Site (the "Site") in Woburn, Massachusetts, pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended (CERCLA), 42 U.S.C. § 9601 et seq., and the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, Mass. G.L. Chapter 21E, as more particularly described below.

A. The United States, the Commonwealth of Massachusetts, Settlers, the Remedial Trust, and their representatives and contractors shall have access to the Property for the purposes of implementing all work and other activities required by the Consent Decree, in accordance with the Consent Decree and the work plans and schedules developed under or in accordance with the Consent Decree, which work plans and schedules are available for inspection at the United States Environmental Protection Agency, Region I, Waste Management Division Records Center, 90 Canal Street, Boston, Massachusetts.

This grant of access shall remain in effect until the recording of a notice, approved and bearing the acknowledgment of the United States Environmental Protection Agency and the Commonwealth of Massachusetts, that certification of completion of the Work, as defined in the Consent Decree, has been made.

B. In addition, the United States, the Commonwealth of Massachusetts, and their contractors and representatives shall have access to the Property for the purposes of conducting any activity authorized by CERCLA and Mass. G.L. c. 21E, as applicable, including but not limited to:

(1) Monitoring all work and other activities required by the Consent Decree;

(2) Verifying any data or information submitted to EPA or the Commonwealth relating to the Site or such work or other activities;

(3) Conducting investigations relating to contamination at or near the Site;

- (4) Obtaining samples; and
- (5) Inspecting and copying records, operating logs, contracts, or other documents required to assess compliance with the Consent Decree.

This grant of access shall remain in effect until the recording of a notice, approved by and bearing the acknowledgment of the United States Environmental Protection Agency and the Commonwealth of Massachusetts Department of Environmental Quality Engineering, that the access provisions set forth in Section XV.A of the Consent Decree has been terminated.

## II. NOTICE OF FURTHER RESTRICTIONS.

Notice is hereby given that, in accordance with the terms of the Consent Decree, the Property may become subject to covenants restricting the use of the property and imposing affirmative obligations on holders of interests in the Property (hereinafter "Institutional Controls") on a subsequent date hereto.

The obligations to implement and comply with the Institutional Controls that may be imposed under the Consent Decree shall run with the land and will require certain actions and impose obligations on future owners, lessees, and successors-in-title and/or possessors of the property. The Institutional Controls may, among other things, prohibit or regulate the construction of buildings, roads, and utilities on areas determined to contain Hazardous Substances (as defined in the Consent Decree) above certain action levels and may prohibit, limit, or regulate the excavation or removal of soils containing lesser degrees of contamination.

This Notice of Further Restrictions shall remain in effect unless and until the recording of a subsequent notice, approved by and bearing the acknowledgment of the United States Environmental Protection Agency and the Commonwealth of Massachusetts Department of Environmental Quality Engineering under the Consent Decree, stating that the Property is not subject to Institutional Controls.

## III. COVENANTS.

Grantor hereby covenants, and the Property is hereby subject to the requirement, that Grantor and his successors and assigns shall:

- (1) record such documents which embody Institutional Controls as may be approved by the United States



Environmental Protection Agency and the Commonwealth of Massachusetts under the Consent Decree, said documents to bear the acknowledgement of the Environmental Protection Agency;

- (2) comply with all provisions of Institutional Controls that are recorded pursuant to Section II(1) above;
- (3) provide access to the Property as required under Section XV.A of the Consent Decree and Section I above;
- (4) until the recording of the documents referred to in Section III(1) above, refrain from transferring any possessory interest in the property, other than a person who holds such interest solely to protect his security interest in the Property and who does not exercise any right to enter or possess the property, without the approval of the United States Environmental Protection Agency and the Commonwealth of Massachusetts Department of Environmental Quality Engineering, which approval shall be deemed given upon re-recording of this instrument with the transferee as Grantor.

The Covenants set forth in Section III(1)-(4) above shall remain in effect until the recording of a notice, approved by the United States Environmental Protection Agency and the Commonwealth of Massachusetts Department of Environmental Quality Engineering under the Consent Decree, stating that the Property is not subject to any Institutional Controls.

#### IV. EFFECT OF COVENANTS, RESTRICTIONS, AND OTHER RIGHTS REFERRED TO OR CONTAINED HEREIN.

The Covenants, Restrictions, and other rights referred to or contained herein run with the land and except as otherwise provided, shall be binding on the Grantor and all persons to whom any interest in the Property, or any portion thereof, is transferred, other than a person who acquires such interest solely to protect a security interest in the Property and who has not exercised any right to enter or possess the Property, and shall expressly be enforceable by the United States and the Commonwealth of Massachusetts, pursuant to the provisions of G.L. c. 184, § 32 or otherwise, or by either one acting singly.

For Grantor's title see deed of [] dated [], 19[], registered as Document No. [] with the [Registry District for Middlesex County] [Middlesex South District Registry of Deeds].

No documentary stamps are affixed hereto as none are required by law as this conveyance is made without monetary consideration.

Executed as a sealed instrument this \_\_\_\_\_ day of \_\_\_\_\_, 1988.

GRANTOR:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

CERTIFICATE OF APPROVAL BY THE SECRETARY

The Secretary of the Executive Office of Environmental Affairs, Commonwealth of Massachusetts, hereby certifies that he approves the foregoing restrictions under G.L. c. 184, § 32.

\_\_\_\_\_  
Secretary, Executive Office of  
Environmental Affairs,  
Commonwealth of Massachusetts